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ABSTRACT

This report reviews the literature on early departure from school in America, both past and present, in order to ascertain why students drop out of school, what the consequences are for the students who do so, and what schools can do to reduce the dropout rate. After a brief historical perspective on the problem, the social and economic costs of dropping out are summarized, and the need for a consistent national definition of the term "dropout" is discussed. The next section cites statistics on the number and characteristics of dropouts over the past 10 years. Findings on the causes of dropping out are subdivided into student factors, school factors, and societal factors. Findings are cited that show how staying in school helps life chances and helping strategies for at-risk youth are discussed in detail. The final section proposes a research program in the area of learning disabilities, as one way to identify at-risk students early in their schooling. An extensive bibliography is included. (TE)

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Early School Leaving In America: A Review of the Literature

by

Irving G. Hendrick

Donald L. MacMillan

Irving H. Balow

Assisted by

David Hough, CERC Fellow

April, 1989

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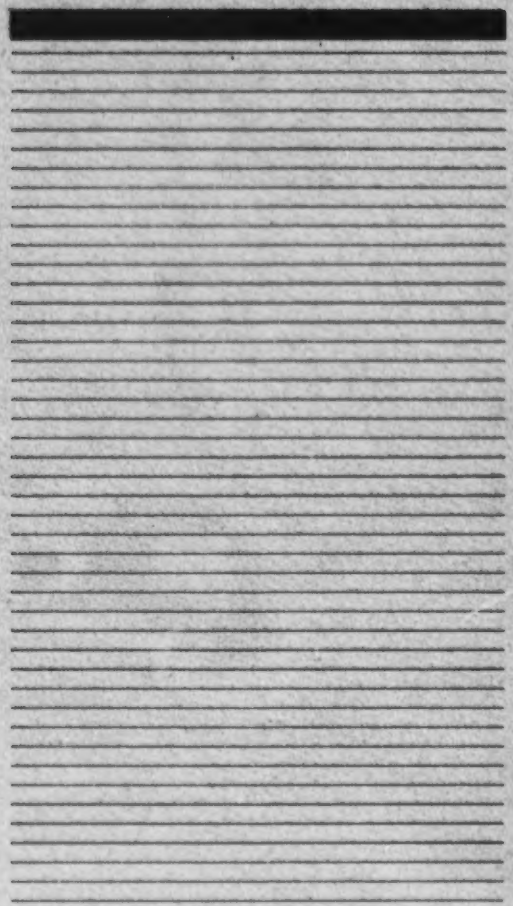

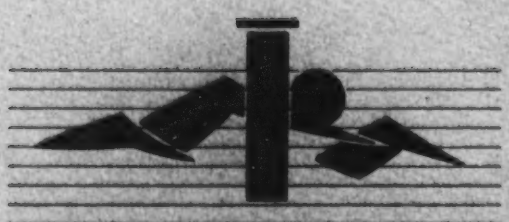

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California Educational Research Cooperative
School of Education
University of California
Riverside, CA 92521-0128
Phone: (714) 787-3026
FAX: (714) 787-3942

CERC Executive Staff

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Professor of Education
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Jane L. Zykowski
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EARLY SCHOOL LEAVING IN AMERICA:
A REVIEW OF THE LITERATURE

A Report Presented to Members of the
California Educational Research Cooperative

by

Irving G. Hendrick

Donald L. MacMillan

Irving H. Balow

Assisted by

David Hough, CERC Fellow

April, 1989

California Educational Research Cooperative
School of Education
University of California, Riverside
Riverside, California 92521

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EARLY SCHOOL LEAVING IN AMERICA: A REVIEW OF THE LITERATURE

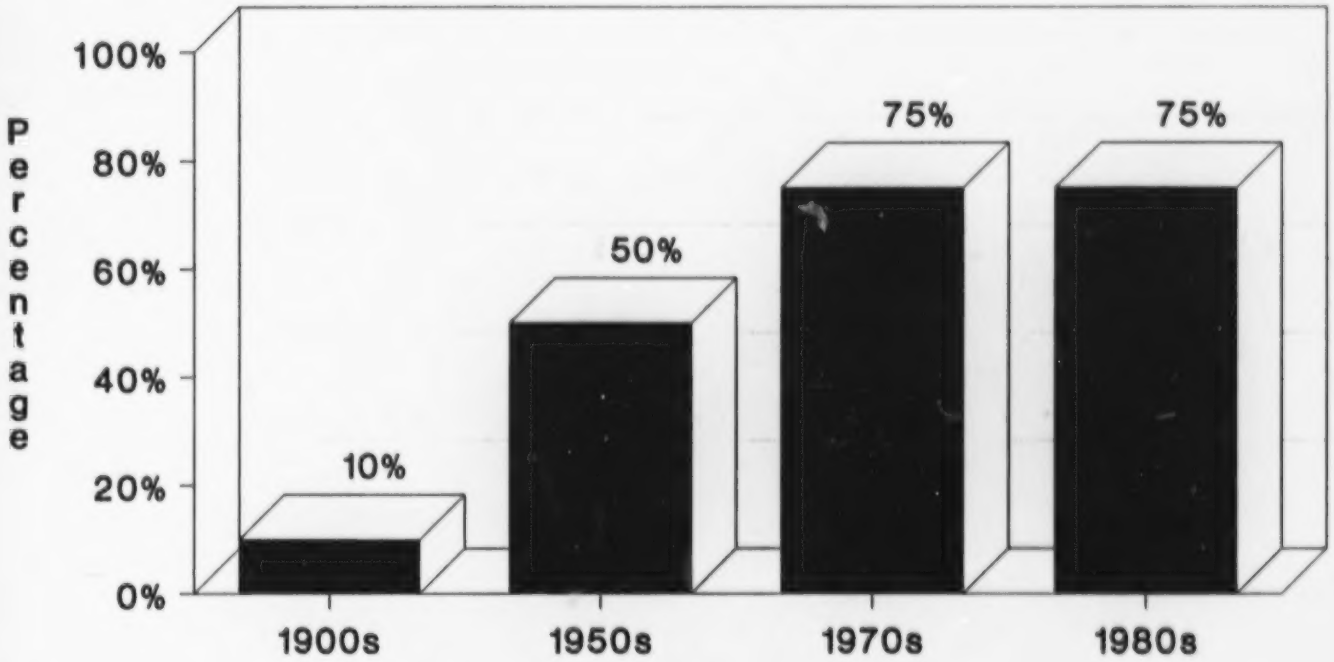
Historical Perspective

America's interest in the general problem of students leaving school prior to graduating from high school is not new. Study of the problem even predates extensive Federal funding of education through the Elementary and Secondary Education Act of 1965 by more than half a century (Hoyt & Van Dyke, 1958; Knudson, 1964). Notwithstanding a long interest in early school leaving, it certainly is the case that there has been an outpouring of literature and initiatives on this topic over the past half dozen years. There has also been some research, but, according to one informed analysis, most of the studies share a glaring absence of theoretical frameworks that may serve to explain why students drop out of school, as well as an historical perspective that generally ignores, or pays scarce attention to previous work in the area (Fernandez & Shu, 1988).

Early in the century the central concern was with early school leavers from the elementary grades. A major study of the era by Leonard Ayres decried the maintenance of unrealistically high standards which encouraged student failure, the repetition of grades, and, eventually, leaving school early (Ayres, 1909). Interest in high school retention began in the 1930s and has increased steadily since. As high school graduation rates increased dramatically throughout the century, schools were able to claim success in educating larger numbers of youth for the world of work and postsecondary education.

When one considers the high-school dropout rate in the absence of the social and economic context, there would appear to be significant reason for cheer. After all, the graduation rate from high school did increase from around 10% in the early 1900s to about 50% in 1950, to a plateau of approximately 75% in the 1970s and 1980s. Indeed, in the forty years between 1940 and 1980 the proportion of persons between 25 and 29 years of age who had not completed high school declined from more than 60 percent to less than 16 percent (Rumberger, 1986).

HIGH SCHOOL
GRADUATION RATE



Comparison of Four Decades

(Source: Rumberger, 1986)

Yet, after having improved steadily during the first two-thirds of the twentieth century, school retention statistics began declining again. In 1967, only 12 percent of American youth left school before graduating from high school. By 1970, the rate had risen to 17 percent; by 1972 to 20 percent, and in 1976 to 22 percent (Wehlage & Rutter, 1986, p. 374). According to one recent national study, 25 percent of fifth grade pupils will not graduate from any high school, conventional or alternative (Mann, 1986, p. 307). Other reports suggest that the number is likely twice that in many large cities. An analysis of dropouts from the Chicago Public Schools indicated that the dropout rate for the class of 1982 was 43 percent, with the bulk of dropout prone students being concentrated in Black and Hispanic high schools of the inner city (Hess & Lauber, 1985). A Texas study suggested that minority students were twice as likely to drop out if they had been attending an impacted (heavily racially segregated) school, and then were reassigned to a desegregated school. This suggests, perhaps, that the disruption of pupils' lives through the reassignment of students to different schools is not conducive to their success in school (Doss, 1984).

It is clear to all that the dropout problem has attracted national attention and provoked considerable alarm of late. The shift from celebration to despair lies in the inability of the U.S. economy to absorb millions of dropouts into the nation's economy, as it was able to do during the first half of the century. Despite their lack of formal education, during simpler times youth still could become meaningfully engaged as workers. Gone are millions of jobs in manufacturing, mining, oil fields, construction, and steel making for which a high school education seemed to make little practical difference.

As recently as 1959, less than half of the civilian labor force aged 18 to 64 were high school graduates. However, by 1970 the proportion had risen to almost two thirds, and by 1985 more than five out of six members of the labor force aged 25 to 64 had high school diplomas (Stern, et al., 1988). Of course, an arguable point in these data is that the increase in high school graduation rates among the work force simply may reflect the successful graduation of more students, rather than any real changes in the skill requirements necessary to meet

the job performance expectations of employers.

It is likely that the recent campaign for raising the standards of public education will not be achieved without further alienating America's least successful students (Hamilton, 1986). In the absence of extensive and appropriate school services, educationally handicapped and disadvantaged minority students especially run increased risks of being forced out of school by conditions in their lives and conditions in schools.

Social and Economic Costs of Dropping Out

Although it is true that the real test of an education's effectiveness is measured in the lives of youth after they leave school--be it through graduation or dropping out--the high economic costs of dropping out to society and to individual dropouts has become apparent to those who have done research on the question. Not surprisingly, dropouts earn less, pay less taxes, and collect more in social services than high school graduates. Researchers base the costs of dropping out on observed differences between school dropouts and comparison groups of high school graduates. Although the specific findings differ somewhat from study to study, it is clear that both the dropout and society lose as a result of early school leaving. Among studies of this problem, only one has produced data suggesting that earnings losses for dropouts are minimal relative to the earnings of high school graduates (Hill, 1979).

If Catterall (1986, 1987) is correct, based on his detailed study of Los Angeles dropouts, the costs are significantly greater than policy makers have been prepared to believe. According to Catterall, the costs of dropping out, based on lost economic activity alone, are substantially higher than the totals spent on the education of each individual over the course of his/her elementary and secondary schooling. Assuming as he did that something under $33,000 (1981 dollars) was spent for the public education of each dropout, the number palls in comparison to costs exceeding $200,000 across the United States which are incurred by each dropout (Catterall, 1986, p. 11). Even if one were to reduce the estimate in lost earnings substantially by adopting an extremely pessimistic view of labor markets

for young adults, the costs remain staggering. When the cost to individuals and to society of lost earnings are augmented by lost tax revenue and increased costs for police, welfare, and health services, the economic and social imperative for sustained attention to the dropout problem leaves little to the imagination.

Need For a National Definition

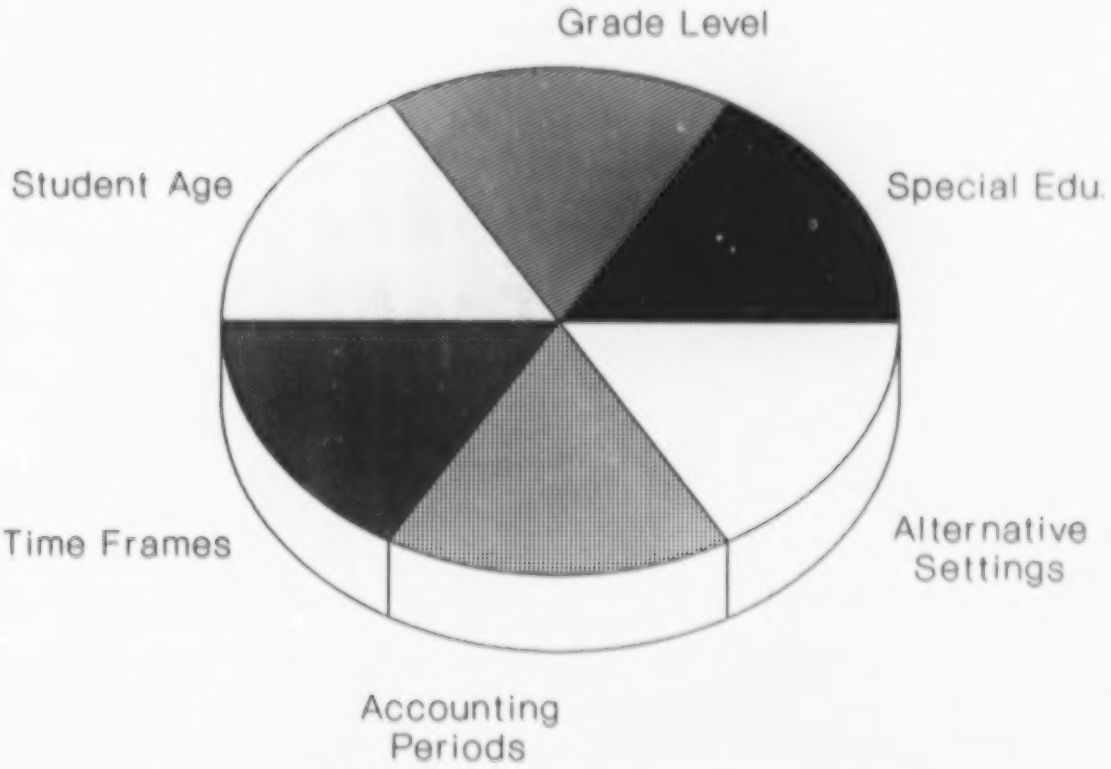
The lack of a consistent national definition of what is implied by the term "drop out" has inhibited society's understanding of early school leaving. According to Morrow (1986), the term "dropout" had been used to designate a variety of early school leavers:

> (1) pushouts--undesirable students; (2) disaffiliated--no longer wishing to be associated with the schools; (3) educational mortalities--students failing to complete a program; (4) capable dropouts--family socialization did not agree with school demands; and (5) stopouts--dropouts who return to school, usually within the same academic year" (p. 343).

Barber & McClellan (1987) reported that the definition of what constitutes a dropout varied widely among the 17 major metropolitan school districts they surveyed. Some school districts even include special education students enrolled in their own public school system in their reports of dropouts (Hammack, 1986). According to Williams (1987), five of the largest sources of variation in definition centered around grade levels used in calculating rates, ages of students who can be classified as dropouts, accounting periods for calculating rates, time periods for unexplained absence, and acceptable alternative educational settings. The pie chart on the following page displays some of these key elements that confound the problem of gaining consensus on a uniform definition of school dropout. The solution most frequently proposed is to agree on some standardized definition of a dropout.

While the point is a valid one, and the problem of multiple definitions of what constitutes dropping out varies dramatically from place to place,

DEFINITION OF A "DROPOUT"
SIX COMPONENTS



WHAT CONSTITUTES A DROPOUT?

the difficulty has been alleviated a bit in California by a state definition which has imposed at least some measure of order on the problem. California's State Department of Education describes a dropout as:

> . . . any student who has been enrolled in grade 10, 11, or 12 but who left school prior to graduation or the completion of a formal education, or legal equivalent, and who did not, within 45 school days, enter another public or private educational institution or school program, as documented by a written request for a transcript from that institution.
>
> (California State Department of Education, 1986, p. 33)

Such a definition at least eliminates the inclusion of students enrolled in special public school programs from being counted as school leavers.

In addition, a new federal definition is being piloted by twenty-seven states, three territories, and the District of Columbia. Various state and federal officials have reached concensus, agreeing that the new national definition should identify a dropout as a student who:

> * Was enrolled in school during the previous school year but not enrolled at the beginning of the current year;
>
> * Has not graduated from high school or completed a state- or district-approved program, and
>
> * Has not transferred to another public-school district, private school, or state- or district-approved education program; been suspended, expelled, or excused from school due to illness; or died.
>
> (Snider, 1989, p. 5)

Number and Characteristics of Dropouts

As difficult as it has been to get a uniform national definition of a "drop out", determining what life conditions are likely to correlate with dropping out, identifying youth at risk of dropping out, and counting how many actually do drop out are among the easiest challenges surrounding this entire issue.

The case of California demonstrates the extent to which the dropout situation has worsened in the past decade. Three out of ten high school students who entered ninth grade did not graduate from high school with the class of 1983, albeit some undetermined proportion of those who did not, have since graduated.

Between 1970 and 1983 the state's high school attrition rate doubled with the largest increase occurring between 1978 and 1979, a period when summer school programs were all but eliminated following passage of Proposition 13, a property tax limitation initiative. In 1977, 9 percent of the dropouts left in the 12th grade, but by 1983 34 percent of the dropout group left in the 12th grade (Assembly Office of Research, 1985).

According to statistics published in 1983 by the National Center for Education Statistics, using the NCES's High School and Beyond data base, the two background characteristics that are most strongly related to dropping out are socio-economic status (SES) and race/ethnicity (Peng & Takai, 1983). The literature is replete with data affirming that youth from lower socio-economic backgrounds--especially from minority groups--are more likely to drop out than their more affluent peers (Tzeng, 1972; Beacham, 1980; Bernoff, 1981; Phoenix Union High School District, 1982; Fine & Rosenberg, 1983; Frazier & Stone, 1983; Mahan, 1983; Peng & Takai, 1983; Scales, 1984; Office of Dropout Prevention, 1985; Fine, 1986). Likely related to socio-economic conditions is the fact that Spanish speaking, language minority, youth tend to drop out of school more frequently than do youth generally (Steinberg, Blinde, & Chan, 1984). On the other hand, a study by Hirano-Nakanishi & Diaz (1982), found that both Spanish speaking and English speaking students seemed to do well if they were exposed to learning activities both in the home and at school.

Data from the High School and Beyond data base of the National Center for Education Statistics was analyzed by four researchers from the Educational Testing Service in 1983 (Ekstrom, et al., 1986). Their analyses support conclusions going back at least a quarter of a century reporting that students of lower SES have higher dropout rates than those from higher SES backgrounds. Dropouts occur more often among Hispanics than among blacks, and more often among

blacks than whites. Other background factors associated with dropout include coming from a single-parent or from a large family, and living in the South or in a large city (Ekstrom, et al., 1986, p. 357). Invariably, youth who drop out tend to come from homes with weaker educational support systems than do students who remain in school.

Unsurprisingly, their school performance was also weaker, i.e., they had lower school grades and lower test scores, did less homework, and reported more disciplinary problems in school. In the national study the typical sophomore dropout's grades were at approximately the sixteenth percentile of the school stayers (Ekstrom, et al., 1986, p. 359).

Causes of Dropping Out

In a word, most research on dropping out of school cannot explain why students discontinue their education. Much of it suggests that dropping out is not a spontaneous decision, but rather is a gradual drifting away from the school as a locus of students' daily activities (Bryk & Thum, 1989, p. 3). At the same time, many studies provide information concerning strong correlates of dropping out. Thus one finds it almost impossible to differentiate between characteristics of the dropouts and the "causes" or "correlates" of dropping out. While the usefulness of these studies is quite limited, many of them do serve to confirm what most educators likely already hold to be fact. One is hardly surprised to learn, for example, that dropping out of high school is directly related to low academic potential, high use of cigarettes and hard drugs (Weng, Newcomb, & Bentler, 1988).

Currently in the United States about one and a half million youth drop-out for various reasons. In a general way, those "reasons" are known to the research community, and in turn are presented by them as "predictors" of dropping out, especially to a large national longitudinal study of high school sophomores and seniors compiled in 1980, 1982, and 1984 by the High School and Beyond Study (Peng & Takai, 1983). The dropout problem has long perplexed school officials in

local districts and state departments of education, leading them--frequently with Federal assistance--to survey their dropouts in search of explanations for early school leaving (Analytic Studies Unit, 1985; Brantner & Enderlein, 1973; Cox, 1985; Hoyt, 1958; Jordan- Davis, 1984; Mahan, 1983; Phoenix Union high School District, 1982; Self, 1985; Snowden & Peel, 1985; Wheeler & Finley, 1980).

Most of the studies have included both student/family factors and school factors as underlying reasons for students leaving school early. Some have emphasized one group of these variables over the others, and a few have placed the blame on society or on policy makers.

Student Factors

Certain predictors of why youth leave school early do not appear to be bounded by time or culture. Over thirty years ago a Connecticut study found that both black and white students dropped out of school principally because of lack of interest, financial reasons, and poor academic performance (Stetler, 1956). More than twenty years ago a study of dropouts in a farming region of Western Canada determined that the best predictors of youth aspirations were past academic performance and measured intelligence. That same study indicated that a close relationship existed between staying in school and levels of educational and occupational aspirations (Sharp & Kristjanson, 1965). Over twenty years ago Gallington (1966) attempted to develop instruments for identifying potential high school dropouts, leading him to conclude that the greatest objective predictors were achievement, reading placement and mathematics placement.

Other research suggests that weak educational support systems from home and peers likely lead to failing in school. Unsurprisingly, a recent Illinois study demonstrated that dropouts were more likely to be failing academically than were students who remained in school (Arnold, 1985). Among high school dropouts of Hispanic background, similar results have been found, i.e., the best predictor of dropout rates has been the student's previous academic achievement (Iwamoto, et al., 1976). Even the process of transferring from one school to another apparently takes it toll. A recent Denver study by Hammons & Olson

(1988) concluded that a very strong negative relationship existed between changing schools and graduation. The more within district transfers during the K-12 school experience of students, the lower the percentage of students who eventually graduated from high school. Understandably, this is a variable over which school officials have only limited control.

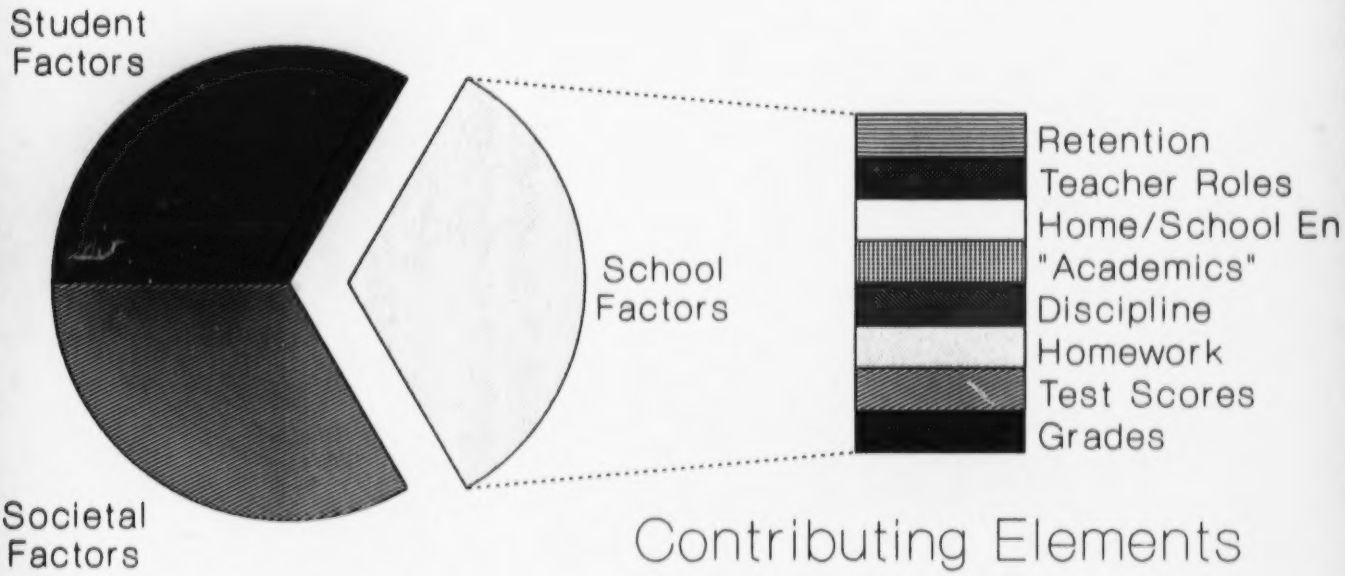
In addition to academic success in school, other factors play some undetermined role in differentiating between persisters and dropouts (Berry, 1974; Brantner, 1973; Hayes & Page, 1979; Tseng, 1972;). In a Louisiana study, Prestholdt & Fisher (1983) found that social influences and attitudes were the two immediate determinants of a student's intentions. Students who were likely to stay in school perceived immediate social benefits and societal rewards for their actions, while the potential dropouts held negative feelings about unavoidable school experiences and were less likely to perceive any good reasons for staying in school. Even among dropouts of high ability, it has been shown that personality, willingness to conform, interests, education skills, and family orientation toward school all play a role (Cardon & French, 1966). An early study by Grinder (1967) found that a weak orientation toward the father and a high involvement in the youth culture by boys helped to predict dropout status.

School Factors

In one major recent study, 35 percent of the males and 31 percent of the females reported leaving school because they "did not like school," while 36 percent of the males and 30 percent of the females attributed their leaving to "poor grades" (Ekstrom, 1986). A fifteen year old study by Bachman, et al., cited by Mann, reported that being retained one grade increases the risk of dropping out later by 40 to 50 percent, two grades by 90% (Mann, 1986, p. 308).

As Mann observed, social promotion is expensive to the school system in terms of maintaining high standards, but high standards themselves may prove costly to dropout candidates in the absence of sensitive implementation. Ekstrom et al.'s study makes clear that students with behavior problems in school, coupled with low grades, constitute the major determinants of dropping out (p. 367).

WHY DO STUDENTS DROP OUT OF SCHOOL?



Contributing Elements

The clear link between poor grades in academic subjects, most frequently in English, mathematics, and social studies, and dropping out was also emphasized by Stoller (1967). Expectedly, the worse the grades became, the higher the likelihood of dropping out. Doss's study (1983) concerning the "holding power" of ninth grade courses revealed, somewhat surprisingly perhaps, that only three courses were significantly related to staying in school or dropping out. Varsity sports and photography were positively related to staying in school, while enrollment in study hall was related to dropping out.

It is evident that not all data-based reports on the dropout issue are the products of objective scientists and researchers. Expectedly, a good deal of passion and blame placing surrounds the issue. Perhaps the most vigorous example of this ilk of writing comes from Boston, where the Massachusetts Advocacy Center (1986) holds the Boston schools responsible for all manner of policies hurtful to the life chances of students enrolled in the system. Still, it seems that certain themes appear whether the subject is pursued passionately, as in Boston, or more analytically, as is the case with most research. In the Boston report nonpromotion was described as "adding insult to injury" (p. 3). During 1984-85, 16.8 percent of Boston's middle school students were not promoted, causing, in the minds of the Advocacy Center authors, harm to the students, the system, and the dropping out of students who were not promoted. Rafoth, Dawson, and Carey (1988) concluded much the same thing, but their report was based on a critical review of research on the subject. That research lead them to conclude that retention is a costly and largely ineffective way to deal with academic failure. What is worse, they reported that not only does retention fail to solve the problems it is intended to solve, but the use of retention may prevent schools from implementing more effective interventions.

Returning to a more analytical approach, in Chicago, Hess and Lauber (1985) and Hess (1987) examined the student records of three graduating classes (1982, 1983, and 1984). Their conceptual orientation was that the burden for reversing the dropout problem rests primarily on changing schools, not the children. The study was comprehensive in nature and involved data collection and

analysis of several sorts. Researchers began by examining elementary schools and their contribution to the dropout problem, in the process finding that the eighth grade graduation rate ran from 100 percent graduation for students who attended certain elementary schools to 100 percent dropout rate for students who attended other elementary schools. Below normal reading scores and the proportion of overage and poor students attending elementary school were strong dropout predictors. Using an ethnographic approach, the study found that high schools emphasizing strong principal leadership, discipline and safety measures, student and teacher attendance, interactive teaching, good facilities maintenance, and cooperation between faculty and administration were successful at retaining students. From this and other research in Chicago by Hess and his associates, it would seem important for school administrators to focus some of their attention in coping with the high school dropout problem at the elementary school level.

Hess, Alfred, & Greer (1987) confirmed the implication of other Chicago studies that eventual dropout rates vary significantly among elementary schools, and went on to declare that 70 percent of Chicago elementary schools inadequately prepare their students for high school. The elementary schools referred to in the study were K-8 schools. Interestingly, the study identified "students reading below normal" as the <u>most important</u> predictor of the dropout rate (p. 11). Another important finding was that holding students back even one grade subsequent to the third grade significantly raised the dropout rate for those held back. Aggressive retention policies in some elementary schools contributed to increased dropout rates (p. 42).

Interesting as well, elementary schools with low dropout rates had disproportionately high levels of teacher experience, while schools with high dropout rates had the highest number of staff in their first year of teaching (p. 47). Although all these conclusions were based on correlational reports, and did not prove cause and effect relationships, they are important enough to merit serious attention. Blacks and poorer communities were served by larger elementary schools, ones which produced more dropouts than other schools.

Closer to home, an empirical study conducted in the Riverside Unified

School District (Agronow, 1988) revealed conclusions much the same as those reported above from the state and national literature. After acknowledging that research is clear about poor academic achievement leading to low self-esteem with respect to school, and that retaining a student one or more grades exacerbates that situation, Agronow pointed out that merely "adopting a policy of non-retention alone is an inadequate solution, since the student passed on to the next grade will not improve in his academic self-esteem or achievement without additional intervention" (p. 5).

Societal Factors

A review of the problem by California's Assembly Office of Research (1983) points to problems created by policy makers and the public at large. Calls for "excellence" in education have resulted in a reduction of course offerings, especially in areas thought to be "frill" subjects, of interest to general--as contrasted with college preparatory--students. That, coupled with enforced proficiency testing prior to high school graduation and grossly inadequate counseling for general students, has reduced the appeal of high school for marginal students, especially during their senior year (California Assembly Office of Research, 1985). Bishop (1989) believes that the apathy among high school students is caused primarily by the failure of business and industry to provide major economic rewards for effort in high school.

Staying in School Helps Life Chances

Although skeptics may wonder if merely staying in school helps the life chances of less academically talented and disadvantaged youth, the evidence is that it does. Ekstrom, et al. (1986) report that regardless of ethnicity, gender, or curriculum choice, staying in school increases achievement gains in all tested areas. A decade earlier another large study had concluded that the most directly relevant school variable likely to reduce poverty was increased educational attainment, because of its correlation to income, which in turn correlated with the quality of one's life (Crumpton-Bawden & Tolbert, 1975).

Helping Strategies for At-Risk Youth

A half-century of interest and concern over why youth leave school prior to graduating from high school has left researchers and policy makers with some insight into the efficacy of certain retention strategies. Unfortunately, school authorities hold only part of the answer. According to Bishop (1989), the key to motivation for students to stay in school is for the larger society to recognize and reward learning effort and achievement. Employers could help by demanding high school transcripts and giving academic achievement much greater weight when hiring. Business and industry could communicate this policy to schools, parents, and students. The role of parents in supporting and encouraging their children to achieve gives the children an obvious advantage.

Bishop (1989) also suggested that schools should reduce the disincentives to studying. Cooperative learning, such as Student Teams and Achievement Divisions, would encourage the peer group to reward learning effort by having students study in small heterogeneous groups and structuring competition between evenly matched teams, rather than unevenly matched individuals. Frequent awards ceremonies could recognize individual effort to attain learning goals, so that every student who works hard is recognized sometime in the school year.

Two major sorts of problems continue to plague school leaders. The first concerns identifying precisely what type of intervention makes constructive sense for students with particular needs. The second deals with the implementation of remedial strategies, once the school leaders are persuaded they know what steps are appropriate for encouraging students to continue their education. Unfortunately, since little or no progress has been made in terms of the first concern, it is impossible to link implementation strategies precisely to appropriate interventions.

The situation is not quite as hopeless as might be suggested by the problem identified above. Even though one cannot pin point the best intervention for a particular at-risk group of students, there are a number of general school strategies that have been shown to be successful in retaining students. Indeed,

one characteristic of the literature on intervention strategies is that almost everything seems to work when enthusiastic and engaged principals and teachers become committed to a specific course of action. Thus favorable results have been shown from the implementation of alternative instructional strategies as diverse as cooperative learning, mastery learning, direct instruction, adaptive education, individualized instruction, peer tutoring, and curriculum-based assessment. All have in one context or another been shown to result in achievement and/or self-concept gains for low achievers (Rafoth, Dawson, & Carey, 1988). One might further assume that alternative programming such as after-school tutoring, remedial reading or math classes, and summer school programs may all be ways to increase time-on-task, a crucial variable in enhancing academic achievement.

Differences in students' academic preparedness and types of school programs offered likely account in part for why some schools show a higher rate of student retention than do others. For example, the Paducah public schools of Kentucky reported a 34.4 percent reduction in dropout rate over a five year period attributable to three projects which emphasized changes in instruction, staff development, and student services (Paducah-Louisville Consortium, 1974). Some body of opinion supports altering the school structure to allow full representation of opposing cultures and views to the end that no student feels out of place (Calabrese, 1988).

Alternative schools and community outreach centers emphasizing basic skills and vocational subjects also have been shown to produce positive changes in student performance (Center for Field Research and School Services, 1973; Foley, 1984; Gifford, 1987; Paul, 1982; Rolla, 1980; Sheridan School District, 1979). The Gifford report, for example, described the program of an alternative high school for marginal and high risk students in Columbus, Ohio. Classes were held at the North Education Center from 8:00 a.m. to 9:30 p.m., and featured year-round, 42-day terms to accommodate students with jobs and family responsibilities. The claim from Columbus is that since the school's inception in 1983, the dropout rate has decreased from 9.6 percent to 2.1 percent. Indeed, even an aggressive "Back on the Track" public relations campaign was established to identify and

locate recent dropouts, provide them with extensive information and counseling, and motivate them to complete high school. Everything from T-shirts, to radio advertisements, to direct mail were used to track down--and round up--the dropouts. Funding for the public relations campaign was all provided by a local shoe manufacturer (Gifford, 1987).

A substantial amount of literature has accumulated over the past two decades on the success of various vocational education efforts at stemming the tide of dropouts, including studies by Brantner (1973), Herr (1984), and Weber (1986). Favorable results also were reported from Washington, D. C., where 125 students who had been identified as possessing few areas of skill mastery were selected to form the "Fresh Start Minischool" (FSMS) (District of Columbia Public Schools, 1980). Teachers at that school emphasized a no-fail philosophy, with students reportedly expressing positive attitudes and experiencing significant gains in basic skills (District of Columbia Public Schools, 1980). More than a decade earlier, an experiment in a suburban Boston high school sought to determine if instruction in achievement motivation would help potential dropouts, concluding that intervention could produce a significant improvement in academic performance among "hard core" problem boys (McCleland, 1968).

In California, Stern et al. (1988) reported success for a program in the San Francisco area which combined academic and vocational courses in an integrated program to reduce high school dropout rates. Known as the Peninsula Academies, two high schools on the peninsula south of San Francisco established a school within a school. One was a "Computer Academy" at Menlo-Atherton High School; the other was an "Electronics Academy" at Sequoia High School. Both schools are located within the Sequoia Union High School District and both have been operating since 1981. The most important finding from the research is that the benefits of the Peninsula Academy model can be replicated at other sites. In the ten sites where replication was attempted, three produced unambiguous evidence that Academy students performed better than the comparison group. The second conclusion is that seven of the ten replication sites so far have not produced unambiguous evidence that students in the Academy program are out- performing

students in the comparison group. In fairness to the academy idea, the investigators pointed out that incomplete implementation of the concept may have contributed to the ambiguity in findings, and that success in some locations but not in others is probably what should be developed and replicated (p. 168).

In the Riverside Unified School District an early prevention of school failure program has been initiated this year as a county pilot for California's Early Intervention of School Success Program (EISS). This program constitutes a version of the national Early Prevention of School Failure Program (EPSF) for "high risk" kindergarten children. The goal of the national, state, and local programs is to prevent school failure through early identification and remediation programs. Some of the project components which require successful implementation include the following: (1) Screening all four to six year old incoming students for language skill, auditory proficiency, visual proficiency, and motor skills by a team of project professionals; (2) recommendation by the project team of appropriate educational strategies and programs for each child, based on his/her learning style and special needs; (3) teacher planning of appropriate instructional activities to meet the needs of each child based on recommendations of the project team; and (4) the encouragement of parents to volunteer in the classroom and work with their child at home (Agronow, 1988).

An impressive empirical study by Bryk and Thum (1989) at the University of Chicago provided some support for the contention that special benefits accrue to disadvantaged and at-risk youth from attending certain kinds of schools. Again, as with the choice between interventions, the results seem to have depended less on the specific kind of school attended, as the fact that the school advocated some specific orientation. The authors were critical of what they characterized as the "shopping mall" curriculum, and instead claimed superior results in schools where the internal differentiation was less evident.

Using the analytic technique known as "hierarchial linear modeling," Bryk and Thum found support for the conclusion that the internal organization features of schools can have significant educative consequences for all students, and especially at-risk youth. Such school features as a committed faculty, an

orderly environment, and a school emphasis on academic pursuits appeared to lower the probability of students dropping out. An important structural feature of the more effective schools was smaller school size, thereby permitting greater opportunity for sustained informal face-to-face adult-student interactions in the school setting (p. 26).

The California State Department of Education (1986) has recommended that an emphasis be placed on the early identification of likely dropouts, and that a close articulation be developed among elementary and secondary schools in addressing the problem. In addition, the state has suggested that an increased emphasis be placed on dropout prevention at the middle and junior high school levels, that counselling programs be improved at all levels, that community cooperation and participation be solicited in addressing the problem, and that school districts commit themselves to evaluating the effectiveness of dropout prevention programs so that mistakes are not repeated and successes can be replicated (p. 9).

The Department has also decided to approach the problem by adopting a media campaign against dropping out, by developing some capacity for providing local assistance to districts through a special unit known as the "High Risk Youth Liaison and Field Services Unit," and by sharing or "brokering" information concerning "model programs on dropout prevention." Such information is to be provided by the new High Risk Youth Unit.

On still another front, the State Department has provided small ($250) awards to persons who submit program descriptions selected for publications in the state's new "STARS" publication entitled STARS: Strategies for Teachers of At-Risk Students. Funding for the project comes from the Mellon Foundation, in cooperation with the Council of Chief State School Officers. The policy amounts to a casting of the net in an effort to identify strategies which will help new teachers who work with students at-risk of dropping out of school. Not all reports of special programs designed to retain disadvantaged students have produced unquestioning praise for the programs. Burkheimer, et al. (1980) reported in their evaluation of Upward Bound programs that the relative success of individual projects seemed to have more to do with the characteristics of students recruited

than the functional or structural characteristics of the projects.

One is left to conclude, in general terms, that for dropouts the major problem is not that nothing has been tried. Since early in the last decade, numerous districts and special agencies have developed programs to cope with the problem, and some have evaluated their results (Blair, 1970; Dept. of Research and Evaluation, 1978; Erickson & Hamler, 1972;). Indeed, projects have been attempted ranging from special instructional assistance in basic skills to the use of art and video for improving the self esteem of potential dropouts (Chin, et al., 1980). By one recent count in a national survey, over 360 academic, vocational, and guidance approaches were being attempted, with many of the programs featuring "cash, care, computers, and coalitions" producing impressive results for <u>some</u> students (Mann, 1986). New York City's "Operation Success," for example, has endeavored to help dropouts by offering a broad range of support services, including employment programs intended to develop skills, self-awareness and self-direction, encourage career goals, and develop appropriate attitudes toward the world of work (Center for Labor & Urban Programs, Research & Analysis, 1984).

The problem nationally is in knowing what was done for whom, and what seems to have worked for particular youth with particular needs. A study of high school dropouts in Appalachia by Cox, et al. (1985) suggested that program efforts to reduce dropouts might be most effective when program direction is linked to the <u>cause</u> of dropping out and the needs of the individual.

There is at least one cause for dropping out of school for which there is little mystery. Teenage pregnancy provides a special set of problems and challenges, ones that may be quite different from those faced by other students at-risk of not completing high school. In 1984 the staff of Lawrence County Vocational School in Chesapeake, Ohio, developed a program which includes prenatal and post-natal health care, education related to child development and parenting, and goal setting directed toward combining the roles of parent, employee, and student. Known as GRADS, about sixty similar programs have been developed throughout Ohio. The program in Chesapeake involves a traveling coordinator who sees students who are allowed out of their regularly scheduled classes for two forty

minute periods per week. According to Ferguson (1987), there has been a reduction in the school dropout rate for pregnant girls and young fathers. Of the 1281 GRADS students in the 1984-85 state program, only 12 percent dropped out of school. The National Center for Educational Statistics reports a national dropout rate of 80 percent for adolescent parents (Ferguson, 1987, p. 3).

Among the large number of articles that address one aspect or another of dropping out, most are not specific about the leadership and implementation roles which will be assumed by the professional actors. By implication it seems generally assumed that Superintendents and principals will play leadership roles and establish policies, and that teachers will execute those policies and follow such leadership as is provided. The literature on the role of other actors, particularly school counselors, is not very expansive. That literature was reviewed by Walz (1987), who reported that only fifteen items indexed under terms related to school counseling or the counselor's role in preventing dropping out of school could be found in the data-base of the Educational Resources Information Center (ERIC) for the period between 1984 and 1986. In reviewing that literature, Walz did identify some dozen strategies that might be employed by counselors, including such things as promoting daily school attendance, encouraging parental participation in school attendance and learning activities, clearly stating and widely disseminating classroom and school goals, helping students to establish and focus in on tangible career goals, assisting students with developing effective learning and study skills, and recognizing and acting upon the interrelatedness of student self-esteem and successful school performance.

Need for Research in Area of Learning Disabilities

The regrettable failing of research efforts to date has been in not focusing more attention on those dropouts most at risk, i.e., those with learning disabilities. So far efforts devoted specifically to learning disabled youth have been limited to a handful of studies and program evaluations. Pooley (1980) reported on the effectiveness of some strategies intended to increase the employability of dropout LD and ED adolescent boys, but the project did not concern retention in

school. Another report described the work being done for LD youth in a modern continuation high school in California, but asked no questions for investigation (Western Association of Schools and Colleges, 1978). A higher dropout rate among LD youth almost certainly reduces their ability to compete successfully in the job market. However, this inference is affirmed by precious little research. In the particular school district studied by Zigmond & Thornton, the school leaving rate was 47 percent for LD students, compared to 36 percent for the school population generally (p. 50). Some studies have shown high employment rates among LD dropouts, while others have shown the opposite. Regrettably, to our knowledge only the Zigmond & Thornton study (1986) has provided for a control sample of nonhandicapped youth. In the absence of such samples, one is hard pressed to know if differences in employment statistics are the result of local/regional economic factors or any number of other potential variables. In the single study where a control group of nonhandicapped students was provided, and where both LD and non LD youth were employed, Zigmond and Thornton found that the LD youth experienced higher dropout rates and significantly lower basic skill competency levels than other children. They also found that failure in ninth grade was highly associated with leaving school early, suggesting that teachers will need to learn how to engage students more actively in their classes and that school officials will need to devise other practical solutions for helping LD pupils get through ninth grade (p. 54).

After studying a large amount of recent data on the dropout question generally, Natriello, Pallas, & McDill (1986) suggested that a comprehensive program of research should include data on student characteristics, school processes, the act of dropping out, and the economic and cognitive consequences of the failure of large numbers of students to complete high school. According to the authors, while considerable efforts have been made to attack this problem in the past, "researchers, policy makers, and educational practitioners must join forces" in a coalition to "plan, implement, and assess programs and policies that will encourage students at risk to complete their high school education" (Natriello, Pallas, & McDill, 1986, pp. 430-431).

Conclusion

To be sure, public schools have an obligation to serve constructively children from all backgrounds and need to improve their effectiveness in serving children who historically have been harder to teach. Some critics of schools over the years, most recently including Wehlage & Rutter (1986), prefer to focus attention on the failings of schools rather than on the marginal student. Certainly schools are not blameless. Students do experience frustrations and incompatibilities with the school's evaluation and authority systems prior to dropping out (Natriello, 1984). Yet, as reported by Dager (1968), family and peer influences probably play a more potent role in the decision than do school related reasons.

We see little point in indicting schools for pushing out students, believing as we do that school officials and teachers will employ such instructional and helping strategies as show signs of being effective in retaining students. There is less point yet in suggesting that dropping out may be okay for some youth. As ineffective as public schools may have been in serving children with significant social, economic, psychological and academic disadvantages, it is still the case that in American society "schooling tends to be distributed more equally than capital, income or employment status" (Carnoy & Levin, 1984). Almost certainly, school personnel will improve their record of retaining students through high school graduation at such point as they possess the knowledge and means to do so. It is in this regard that researchers and policy makers have much to contribute.

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